means for associating at least one supercategory with multiple categories by mapping the multiple categories to the at least one supercategory;

means for associating an advertisement with at least one of said supercategories;
means for determining at least one term associated with a data query;
means for determining a first of said at least one supercategory based on at least one term

of said data query and said multiple categories of the at least one supercategory; and

## **REMARKS**

means for displaying an advertisement associated with said first supercategory.

In the Office Action, the Examiner rejected the pending claims under 35 U.S.C. §102(e) based on U.S. Patent No. 6,327,574 to Kramer et al. ("Kramer"). Although the Examiner states, in numbered paragraph 4 of the Office Action, that claims 1-25 are rejected based on Kramer, Applicants note that claims 1-5 were previously canceled in the Preliminary Amendment filed on March 28, 2000.

By this Amendment, Applicants have amended claim 24 to correct a typographical error. Claims 6-25 are currently pending.

Applicants respectfully traverse the rejection of claims 6-25 under 35 U.S.C. §102(e) based on Kramer.

Kramer is directed to the modeling of consumer attributes for targeting content in a privacy preserving manner. According to Kramer, consumer profiles are developed and maintained with information reflecting the consumer's online and offline transactions. (Kramer, Abstract). The consumer profiles include hierarchical attribute vectors which encode attributes

Patent U.S. Serial No. 09/282,764 Attorney Docket No. 99-808RCE1

of a consumer at progressively higher levels of abstraction. (<u>Id.</u>). Documents delivered to the consumer may be customized for the particular preferences of the consumer based on the attribute vectors. (Kramer, col. 2, line 56 through col. 3, line 9).

The present invention, as recited in claim 6, for example, is directed to a method for targeting advertisements that includes, among other things, associating at least one category with documents that may be retrieved and associating at least one supercategory with multiple categories by mapping the multiple categories to the at least one supercategory. In response to a data query, at least one supercategory is determined and an advertisement associated with the supercategory is displayed.

In the rejection based on Kramer, the Examiner appears to be equating the hierarchical attribute vectors of Kramer with the category and supercategory recited in claim 6. For instance, the Examiner cites portions of columns 32 and 33 of Kramer as disclosing the categories and supercategories recited in claim 6. These sections of Kramer disclose:

For example, FIG. 14 the merchant in line 1404 is a bookseller vending a large variety of different types of books. Further, assume that the attribute vector 808 includes a "children" aggregate attribute that is an aggregate of a number of more specific attributes, such as "infant/preschool," "young school age," "middle schoolers," and "high schoolers." . . .

Therefore, the merchant chooses to make use of the hierarchical structure of the attribute vector to effect a hierarchical discrimination of its content. The first illumination candidates transmitted to the consumer's computer cover the broad areas of cooking, travel, sports, automotive, children, crafts, computers, and school. These illuminations will be processed by the Illumination Sorter 816 to determine which categories are most relevant to the consumer. The most relevant illumination will be displayed initially in the illuminated document, with the selected ones of the remaining illumination candidates available to the consumer via the content rotator, and ordered by their relevancy (e.g. match scores).

From this list, assume that the illumination for the "children" attribute is selected as the best match with the consumer. Indeed it may well be that the consumer has

Patent U.S. Serial No. 09/282,764 Attorney Docket No. 99-808RCE1

a new infant, but the merchant does not know this fact at the time the illumination is selected or presented to the consumer, because, as noted above, the illuminations are selected without their provider having any explicit access to the facts or model of the consumer.

When the consumer clicks on the content item 1408 ("Top 20 List of best selling books for your child"), the merchant's server receives an explicit request for children's books. This request is then used to select a more specific set of potential illuminations to send to the consumer's computer. In effect, the merchant is now aware of the consumer's interest in children's books (as this information has been volunteered by the consumer when he clicked on the content item 1408), but still does not know which sub-category of children is appropriate. Thus, the second set of candidate illuminations is directed to specific sub-categories within the children category (infant/preschool, young school age, middle schoolers, and high schoolers), and includes target vectors 1036 containing attributes corresponding to these specific sub-categories. The relevancy vectors 1038 is also set to restrict interest to only these attributes.

(Kramer, col. 32, lines 32-38 and col. 32, line 45 through col. 33, line 14). As discussed in these sections of Kramer, an attribute vector is used to describe a consumer. In the example given by Kramer, the attribute vector includes a "children" attribute which, when set, presumably indicates that the consumer has a child. The attribute vector is hierarchical in that the "children" attribute may be based on a number of lower-level attributes/categories such as "infant/preschool," "young school age," "middle schoolers," and "high schoolers."

In contrast to Kramer, claim 6 recites, for example, "associating at least one category with documents that may be retrieved." The attributes/categories of Kramer are not associated with documents as recited in claim 6. Instead, the attributes/categories of Kramer are used to directly describe a particular consumer. Although Kramer may disclose setting the consumer attributes based on documents of the consumer, (Kramer, col. 5, lines 30-45), the consumer attributes are not associated with these documents.

Claim 6 further recites determining at least one term associated with a data query, determining a first of the at least one supercategory based on the at least one term of the data query and the multiple categories of the at least one supercategory, and displaying an advertisement associated with the first supercategory. Applicants submit that Kramer additionally fails to disclose or suggest these features of claim 6.

In particular, Applicants submit that Kramer does not disclose determining a first of a supercategory based on at least one term of a data query and the multiple categories of the supercategory, as recited in claim 6. The Examiner points to column 32, lines 58-59 of Kramer as disclosing this feature. This section of Kramer states: "From this list, assume that the illumination for the "children" attribute is selected as the best match with the consumer." The list of "illuminations" mentioned by Kramer is a list of targeted content, such as advertisements, that the advertiser transmits to the consumer's computer. (See Kramer, col. 32, lines 45-47). Kramer discloses comparing the list of illuminations to the attribute vector that describes the consumer to come up with the best matching illumination for the consumer. Thus, Kramer selects an illumination based on a comparison of the available illuminations to the consumer attribute vectors. Kramer, however, does not disclose or suggest determining a first supercategory based on at least one term of a data query and the multiple categories of the first supercategory, as recited in claim 6. Because Kramer does not disclose or suggest this feature of claim 6, Kramer could not possibly disclose or suggest displaying an advertisement associated with the first supercategory, as is also recited in claim 6.

For at least these reasons, Applicants submit that each element of claim 6 is not disclosed or suggested by Kramer. Accordingly, the rejection of claim 6 should be withdrawn.

Independent claims 15 and 24 recite features similar to those recited in claim 6, and therefore, based on similar rationale, the rejection of these claims should also be withdrawn. The rejection of dependent claims 7-14, 16-23, and 25, at least by virtue of their dependency on one of independent claims 6, 15, and 24, should also be withdrawn.

In addition, the dependent claims include additional features not disclosed or suggested by Kramer. For example, claim 7 recites ranking more than one supercategory to determine a first supercategory. Applicants submit that Kramer fails to disclose ranking of supercategories as recited in claim 7. The Examiner points to column 21, lines 32-34, along with column 32, lines 47-52 as disclosing this feature. Kramer at column 21, lines 32-34 states: "The goal of creating the attribute vector is to allow illumination candidates to be evaluated and ranked according to their relevance to the consumer." Kramer at column 32, lines 47-52 discloses that an illumination sorter 816 determines which categories are most relevant to the consumer. As discussed above, however, the illumination candidates discussed by Kramer are not equivalent to the supercategories recited in the pending claims. Accordingly, for at least this additional reason, the rejection of claim 7 should be withdrawn.

Dependent claim 10 recites ranking the documents in accordance with terms occurring in the data query and terms occurring in the multiple categories of the first category. Applicants submit that Kramer completely fails to disclose this feature of the invention, and, for at least this additional reason, the rejection of claim 10 should be withdrawn.

Dependent claims 16 and 19 recite features similar to claims 7 and 10. Accordingly, based on a rationale similar to that given for claims 7 and 10, the rejection of claims 16 and 19 should be withdrawn.

Patent U.S. Serial No. 09/282,764 Attorney Docket No. 99-808RCE1

In view of the foregoing amendment and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-2339 and please credit any excess fees to such deposit account.

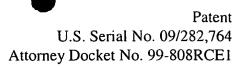
Respectfully submitted,

By: James Weixel

Reg. No. 44,399

Date: 1/3/2003

Verizon Corporate Services Group Inc. 600 Hidden Ridge, HQE03H01 Irving, Texas 75038 (781) 466-2220





## MARKED-UP VERSION OF CLAIMS SHOWING CHANGES

24. (Three Times Amended) An apparatus for displaying advertisements comprising: means for associating at least one category with documents that may be retrieved, said category including at least one term;

means for associating at least one supercategory with multiple categories by mapping the multiple categories to the at least one supercategory;[;]

means for associating an advertisement with at least one of said supercategories; means for determining at least one term associated with a data query;

means for determining a first of said at least one supercategory based on at least one term of said data query and said multiple categories of the at least one supercategory; and means for displaying an advertisement associated with said first supercategory.